

PATENT
Docket No. H 3933 PCT/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Akram et al.	Grp./A.U.:	1751
Appl. No.:	09/937,912	Examiner:	Eisa B. Elhilo
Filed:	January 24, 2002	Customer No.:	00423
Confirm. No.:	7117		
Title:	PHOSPHATE-TYPE TENSIDES COMBINED WITH HAIR CONDITIONING AGENTS IN HAIR COLOURING COMPOSITIONS		

Declaration Under 37 CFR 1.132

Sir:

I, Dr. Mustafa Akram, declare as follows:

- 1) I am a co-inventor of the subject matter of the above-identified patent application.
- 2) I received the degree of Diplom in Chemistry from Martin Luther University Halle - Wittenberg in Halle, Germany in 1978. I then received a Ph.D. in Organic Chemistry with the degree of Dr. rer.nat. [Doctor of Natural Science] from Hamburg University in Hamburg, Germany in 1984.
- 3) In 1985, I joined a company which was a predecessor to the assignee of the present application (Hans Schwarzkopf GmbH & Co. KG, hereinafter referred to as "Schwarzkopf") as a chemist in the Hair Dye Synthesis Group. From 1990 to 2003, I was the Senior Manager of the Color Development Department at Schwarzkopf. Since 2003, I have been the Director of Schwarzkopf's R&D department for Perms and Colors.
- 4) I have read and am familiar with the rejections set forth in the parent patent application, S.N. 09/937,912. I have also read and am familiar with the references cited as the bases for these rejections, specifically, U.S. 5,843,193 (Hawkins, et al.), U.S. 5,494,489 (Akram et al.) and U.S. 5,580,357 (Cotteret et al.).
- 5) Under my direction and control, dye formulations were prepared to show the synergistic effect resulting from the combination of a cationic polymer with the tensides of formula (I).

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6) The following formulations were prepared (all amounts are in % by weight of the total formulation, unless specified otherwise):

<u>Ingredient</u>	<u>A</u>	<u>B</u>	<u>C</u>
Aqueous ammonium carbopol sol'n (1%)	15.0	15.0	15.0
Aqueous ammonium rohagit sol'n (6%)	5.0	5.0	5.0
Oleth-7	6.0	6.0	6.0
Potassium oleate (12.5% aq. sol'n)	15.0	15.0	15.0
Potassium ricinoleate (12.5% aq. sol'n)	3.0	3.0	3.0
PLANTAREN 2000	0.5	0.5	0.5
Titanium dioxide	0.5	0.5	0.5
CETIOL V	3.0	3.0	3.0
Cetyl alcohol	16.0	16.0	16.0
Glycerol monostearate	3.0	3.0	3.0
Tetrasodium EDTA	0.4	0.4	0.4
KOH (50% aq. sol'n)	0.6	0.6	0.6
Pyrogenic silica	0.25	0.25	0.25
p-Toluenediamine	0.64	0.64	0.64
Resorcinol	0.14	0.14	0.14
2,7-Dihydroxynaphthalene	0.07	0.07	0.07
2-Methylresorcinol	0.05	0.05	0.05
3-Aminophenol	0.03	0.03	0.03
4-Chlororesorcinol	0.03	0.03	0.03
Ammonia (25% aq. sol'n)	6.0	6.0	6.0
Ascorbic acid	0.1	0.1	0.1
Sodium sulfite	0.1	0.1	0.1
Phospholipid EFA	1.0	---	0.5
MIRAPOL A 15	---	1.0	0.5
Perfume	0.5	0.5	0.5
Water	q.s.	q.s.	q.s.

A) Comparative

B) Comparative

C) Inventive Composition

7) Protocol:

Each of the compositions was mixed with a 6% aqueous solution of hydrogen peroxide in the ratio of 1:1 immediately prior to use. The hair of each individual test subject was divided into two equal parts (i.e., right and left sides of the head). Onto one part of the head one comparative composition (either A or B) was applied and onto the second half of the head the inventive composition C was applied. After a contact time of about 30 minutes the entire head of each subject was rinsed with water and then shampooed and dried. Four specialists in the art of hair treatments judged the dry and wet behavior of both sides of the head of each test subject (i.e., wet combability, wet grip, dry combability, and dry grip) in a blind test. Each comparison (i.e., C vs. A and C vs. B) was performed on the heads of three test subjects.

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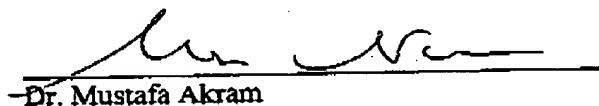
8) The results were as follows:

C vs. B C was judged as being clearly better in all tests
C vs. A C was judged as being slightly better in all tests

9) Analysis:

The results show that inventive composition C, which contains a mixture of 0.5% Phospholipid EFA (a compound of formula I of the invention) and 0.5% MIRAPOL A15 (cationic polymer), exhibits better dry and wet behavior characteristics when compared to compositions containing 1% each of these ingredients alone (A or B).

10) I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing therefrom.



-Dr. Mustafa Akram

Date: 17.04.2005